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54 **Food product.**

57 A meat-based spreadable product comprises 15-40 wt.% of lean meat having at most 15 wt.% of fat, 10-30 wt.% of precooked meat fibres, 0.5-3 wt.% of alkali metal caseinate and up to 35 wt.% of an oil or fat composition having at most 35% saturated fatty acid residues in the digestible part and a PUFA to MUFA to SAFA ratio of 1:(0.2-1.1):(0.1-0.8) (all percentages based on the final product). Also a process of preparing the product has been disclosed.

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trite), 645 grams of broth, 15 grams of a spice mixture, 45 grams of tomato puree and 60 grams of sodium caseinate and the bowl-chopping was continued until an emulsion was obtained (at 45-50 °C).

Finally, 600 grams of precooked pollack fibres (having a dimension of 20 mm x 20 mm) were mixed in. After this, the mixing was finished by mixing for 2 minutes under vacuum. The mixture obtained was filled into cans, which were sterilized for 40 minutes at a temperature of 114 °C with 1.2 bar of over-pressure. The sterilized cans were cooled slowly.

An excellently spreadable, tasty fish meat-based spread product was obtained.

### EXAMPLE V

675 grams of lean beef and 900 grams of sunflower oil were mixed while chopping and heating to 75 °C in a bowl-chopper.

To the mixture obtained were added 45 grams of curing salt (comprising 0.9 wt.% of sodium nitrite), 690 grams of water, 19.5 grams of a spice mixture, 10.5 grams of sugar and 60.0 grams of sodium caseinate, and bowl-chopping was continued until an emulsion was obtained (at 45-50 °C). Finally, 600 grams of precooked lean beef fibres (having a dimension of 15 mm x 15 mm) were mixed in and the last 2 minutes of the mixing were performed under vacuum.

The mixture obtained was filled into tubs, which were pasteurized at 90 °C for 60 minutes. The pasteurized tubs were finally cooked slowly. An excellently spreadable, tasty meat-based spread was obtained.

### Claims

1. A meat-based spreadable product comprising from 15% to 40% by weight (based on the final product) of lean meat having at most 15% by weight of fat, from 10% to 30% by weight (based on the final product) of precooked meat fibres, from 0.5% to 3% by weight (based on the final product) of alkali metal caseinate and up to 35% by weight (based on the final product) of an oil or fat composition, in the digestible part of which the fatty acid residues comprise a maximum of 35% of saturated fatty acid residues and the ratio of polyunsaturated fatty acid residues to mono-unsaturated fatty acid residues to saturated fatty acids is 1:(0.2-1.1):(0.1-0.8).

2. A meat-based spreadable product according to claim 1, in which the meat is selected from the

group consisting of: mammal meat, fish meat (including shell fish), poultry meat, and mixtures thereof.

3. A meat-based spreadable product according to claim 1, in which the alkali metal caseinate is sodium or potassium caseinate.

4. A meat-based spreadable product according to claim 1, in which the digestible part of the oil or fat composition comprises at most 25% of saturated fatty acid residues.

5. A meat-based spreadable product according to claim 1, in which in the digestible part of the oil or fat composition the amount of mono-unsaturated fatty acid residues is at least one third of the amount of polyunsaturated fatty acid residues.

6. A meat-based spreadable product according to claim 1, in which the oil or fat composition is selected from the group consisting of: a single oil, a mixture of oils, and a liquid oil and a hard stock.

7. A meat-based spreadable product according to claim 6, in which the hard stock is a non-digestible fat replacer.

8. A meat-based spreadable product according to claim 6, in which the hard stock is a polyol fatty acid polyester of which, on an average, more than 70% of the polyol hydroxyl groups have been esterified with straight or branched chain C<sub>8</sub>-C<sub>22</sub> fatty acids.

9. A meat-based spreadable product according to claim 6, in which the hard stock is a sucrose straight or branched chain C<sub>8</sub>-C<sub>22</sub> fatty acid polyester.

10. A meat-based spreadable product according to claim 1, comprising a functional additive, selected from the group consisting of: curing salt, common salt, herbs, spices, flavouring agents, colouring agents, sugars, antioxidants, preservatives, emulsifiers, stabilizers, vegetables, dairy products, protein of animal, vegetable or mycotic origin, and mixtures thereof.

11. A process for the preparation of a meat-based spreadable product having a blood cholesterol lowering effect, which comprises:

(a) comminuting 15% to 40% by weight (based on the final product) of lean meat having at most 15% by weight of fat, 0.5% to 3% by weight (based on the final product) of alkali metal caseinate and up to 35% by weight (based on the final product) of an oil or fat composition, in the digestible part of which the fatty acid residues comprise a maximum of 35% of saturated fatty acid residues, and the ratio of polyunsaturated fatty acid residues to mono-unsaturated fatty acid residues to saturated fatty acid residues is 1:(0.2-1.1):(0.1-0.8), while heating to at most 75 °C;

(b) adding water, salt and optionally functional additives during this comminution at a temperature between 65 °C and 75 °C; and

(c) admixing from 10 to 30% by weight (based on the final product) of precooked meat fibres.

12. A process according to claim 11, in which the product is filled into cans, sterilized and subsequently cooled. 5

13. A process according to claim 11, in which the meat is selected from the group consisting of: mammal meat, fish meat (including shell fish), poultry meat, and mixtures thereof. 10

14. A process according to claim 11, in which the alkali metal caseinate is sodium or potassium caseinate.

15. A process according to claim 11, in which the digestible part of the oil or fat composition comprises at most 25% of saturated fatty acid residues. 15

16. A process according to claim 11, in which in the digestible part of the oil or fat composition, the amount of mono-unsaturated fatty acid residues is at least one third of the amount of the polyunsaturated fatty acid residues. 20

17. A process according to claim 11, in which the oil or fat composition is selected from the group consisting of: a single oil, a mixture of oils, and a liquid oil and a hard stock. 25

18. A process according to claim 17, in which the hard stock is a non-digestible fat replacer.

19. A process according to claim 17, in which the hard stock is a polyol fatty acid polyester of which, on an average, more than 70% of the polyol hydroxyl groups have been esterified with straight or branched chain C<sub>8</sub>-C<sub>22</sub> fatty acids. 30

20. A process according to claim 17, in which the hard stock is a sucrose straight or branched chain C<sub>8</sub>-C<sub>22</sub> fatty acid polyester. 35

21. A process according to claim 11, in which the functional additive is selected from the group consisting of: curing salt, common salt, herbs, spices, flavouring agents, colouring agents, sugars, antioxidants, preservatives, emulsifiers, stabilizers, vegetables, dairy products, protein of animal, vegetable or mycotic origin, and mixtures thereof. 40

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## EUROPEAN SEARCH REPORT

Application Number

EP 90 20 1374

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
D,A	DE-A-2 639 177 (H. HOHENESTER) * Claims 1-6; page 5, paragraph 3; examples 1-2 *	1-4,6, 10-11, 13-15, 21	A 23 L 1/314 A 23 L 1/315 A 23 L 1/325
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A	GB-A-1 065 917 (J. MORRELL AND CO.) * Claims 1-4 *	1-2	
A	CHEMICAL ABSTRACTS, vol. 107, 1987, page 611, abstract no. 174779d, Columbus, Ohio, US; & JP-A-62 163 669 (TAIYO FISHERY CO., LTD) 20-07-1987 * Abstracts *	1-2	
A	US-A-3 600 186 (F.H. MATTSON) * Claim 1; column 2, lines 1-34 *	8-9,19- 20	<b>TECHNICAL FIELDS SEARCHED (Int. Cl.5)</b>  A 23 L
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>26-09-1990</b>	Examiner <b>SANTOS Y DIAZ A.I.</b>
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document  T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons  & : member of the same patent family, corresponding document			